Society Reports.

NEW YORK NEUROLOGICAL SOCIETY.

Stated Meeting, March 8th, 1898.

B. Sachs, M. D., President.

Dr. William Hirsch presented a baby of fifteen months, who had been referred to him about one week ago because of certain movements of the head. The child had been perfectly healthy up to about two months ago, when it had fallen from a chair, and struck the back of the head. Vomiting set in immediately afterward, and lasted for about a week. The mother then noticed the peculiar shaking of the head, which has kept up ever since. Examination of the nervous system is absolutely negative. On examining the eyes, one observes that there is a nearly absolute unilateral nystagmus. There is a horizontal nystagmus of the left eye, while the right eye shows the same condition, though very much less marked. The speaker said that it had been claimed by some that these movements in children were brought about by an effort at compensation for the nystagmus. A point in favor of this theory was that the movements cease during sleep. Others had claimed that the movements of the head and the nystagmus had a common cause—e. g., cerebellar lesion. None of the reported cases shows the difference existing in the two eyes as in this case.

Dr. W. M. Leszynsky said that he had seen quite a number of these cases. A great many of them had been found to have ocular defects. In this case, the injury was probably only a coincidence. When the child gets old enough to fix the eyes on objects, these movements are prone to occur. Some years ago he had seen such a case at the Manhattan Eye and Ear Hospital. It was thought that the child was blind and had optic atrophy. He had kept the child under his observation for seven or eight months. It improved under tonic treatment, and ultimately recovered completely. He did not believe, therefore, that there was any actual morbid change in these cases.

Dr. George W. Jacoby said that he had not found these cases uncommon, and he believed that they occur directly as a consequence of traumatism. There were two distinct classes of cases, i. e., those with nystagmus, and those without it. In the majority of cases, by excluding vision, it would be found that the movements of the eye cease. In this child there seemed to him to be some up and down movement interspersed with the other movements. Some years ago he had seen an interesting medico-legal case, occurring in an adult—a man who had been struck in the eye by an electric light wire. The eye had been perforated. After losing the eyeball he presented certain psychic symptoms, together with some head nodding, which he had continued ever since. He was now rather feeble-minded. Inasmuch as in this man there was nothing pointing to injury of any other part of the brain except the frontal lobe, the question arose as to whether there was any possible connection between the injury to this lobe and these movements.

Dr. Frederick Peterson said he believed Henoch first described these movements, many years ago. He had himself described ten cases, some years ago, as gyrospasms, representing all the different varieties. Most of the cases have a lateral movement, but some have the head nodding. Henoch thought the condition was a reflex from dentition, as the majority of the cases developed at about the age of eight or ten months. The theory that he had adopted was that these cases were almost always the result of a trauma or concussion. A point worthy of note was that there could not be any marked pathological lesion, as all of them recovered. The lateral movement of the head and the movement of the eyes seemed to him to be due to functional troubles in different parts of the brain. Many of these cases would temporarily stop the movement if the eyes were fixed on an object. If the lateral movement were due to nystagmus, it was curious that the nystagmus should be present in the head-nodding movement.

Dr. Mary Putnam-Jacobi said that many years ago she had seen a case coming on spontaneously in a child of two years. It was peculiar in that a rotary movement came on every night at bedtime.

Dr. Fraenkel said that he had recently seen a child of nine months, who, according to the mother, had exhibited a rotary movement of the head and a vertical nystagmus since it was three months old. This nystagmus occurred when the nodding movements ceased. This would seem to support the view of Dr. Leszynsky, that it is dependent upon some refractive condition of the eye.

Dr. Hirsch said that the objective examination by Dr. Koller showed the eyes to be entirely normal. All the theories offered would not hold good in a case of unilateral nystagmus. That the condition in the present instance was caused by traumatism alone seemed almost certain from the history. The movements of the head are entirely separate from those of the eyeball. The fact that most of the children recover was sufficient to exclude an organic lesion, but a slight pachymeningitis in the region of the cerebellum might recover.

Dr. Fraenkel presented a child, two and a half years old, born of healthy parents. The family history is negative. The child was born at full term, by the breech, after a rather difficult labor. Immediately after its birth the abnormal condition of the lower extremities was noted. The mother insists that the child has improved. Examination shows a moderate lateral curvature, and the child is unable to sit, walk or stand. Electrical examination shows extensive degeneration of all the muscles except the calves. The knee-jerks are absent, but there is an ankle clonus on both sides. At first sight, the case seemed to be one of poliomyelitis, but it was conceivable that the condition was the result of a dropsy, or of a hemorrhage from rupture of the anterior spinal artery. As this vessel supplies the anterior horn almost exclusively, it was possible that a traumatic poliomyelitis had developed, extending from the mid-dorsal to about the third lumbar segment. Or, there might be a localized cavity formation. He would explain the existence of the ankle clonus by the theory that, as the calf muscles were in a state of increased tonus, due to the fact that the antagonists were gone, the moment a sensory stimulus was applied, and entered the cord, the latter being in a state of increased receptivity; the evidence of its having received this stimulus was shown by an additional motor discharge. The spinal curvature was to be explained by the unilateral involvement of the spinal muscles. The posterior muscles below the knee gave an exaggerated response with both electric currents, while there was no reaction in the muscles above the knee.

Dr. Peterson asked why this explanation of the ankle clonus would not apply to all other cases of poliomyelitis, in which, it was well known, there was no ankle clonus.

Dr. Fraenkel replied that the presence or absence of ankle clonus was dependent upon quantitative changes in the tonus of the muscles. The increased tonus of the calf muscles only he did not think existed ordinarily in cases of poliomyelitis.

Dr. Terriberry said that the marked extension of the foot was seen quite frequently in ordinary poliomyelitis, owing to one set of muscles being left without any antagonizing ones. But the other features of this case were certainly unusual.

Dr. Joseph Collins accepted the pathological explanation given by Dr. Fraenkel. The fact that ankle clonus does not occur in ordinary cases of anterior poliomyelitis did not negative the explanation given. The case was, in reality, a unique substantiation of the theory proposed by Dr. Fraenkel last winter, and adopted by Hughlings Jackson in his lecture this year. In no case of complete anterior poliomyelitis that he had seen had there been any hypertonus of the calf muscles.

Dr. B. Sachs thought there was at least one other view that could be put forward. He did not think that there was this amount of spasticity in a very large number of cases of ordinary poliomyelitis. He had not seen a single instance of ankle clonus in an ordinary case of poliomyelitis; the unusual spastic condition in the present case must be due to some special lesion. It was fair to assume that in this case there was some developmental defect. The entire appearance of the leg reminded him very much of cases in which children had been born with defective limbs. On the supposition that the spinal cord was defective, chiefly in the gray matter in the region of the lumbar segments and in the lateral columns, one could understand how the knee-jerks might be absent and the ankle clonus present.

Dr. Fraenkel said that in estimating the comparative frequency of ankle clonus and of absence of the knee-jerks in ordinary cases of polomyelitis, it should be remembered that it was exceptional to examine such cases on these points.

Dr. Joseph Collins presented a boy of thirteen years with lateral curvature of the spine, atrophy of the muscles of the right upper extremity and the condition of the face known as the Schultze eye. The only history was that he had begun to have diarrhœa three or four years ago, and that this had persisted pretty constantly for a year or two. He looked upon the case as one of syringomyelia affecting the anterior horns, and he based this diagnosis chiefly on the ocular symptoms on one side, the atrophy of the hand and the spinal curvature. The atrophy of the hand had begun about two years ago.

Dr. G. W. Jacoby said that to base the diagnosis on these three symptoms alone required considerable assurance. In his opinion,such a diagnosis was not warranted, unless there were marked sensory disturbance with the atrophy.

Dr. William Hirsch said that he had recently shown two cases of syringomyelia in another society, which showed the same condition of the muscles and of the eye—the narrowing of the fissure of the eyelid and the contraction of one pupil. There were also present the typical sensory symptoms, but the atrophy of the ulnar group and the condition of the eye had led him to believe that it was a typical form of syringomyelia located between the last cervical and first dorsal segment. He had also recently seen in private practice a lady with the same condition of the eye, and with a herpes zoster in the trigeminal region, and who also showed instead of an atrophy a tremor of the left arm and a slight analgesia. The diagnosis made by Dr. Collins seemed to him perfectly justified. The other more characteristic symptoms would probably develop later.

Dr. L. Stieglitz agreed with the diagnosis of syringomyelia, and remarked that at the last meeting he had presented a counterpart of this case, in which no sensory symptoms were present, and also a typical case of syringomyelia. He thought it was not uncommon to find these cases without sensory symptoms.

Dr. Terriberry remarked that an injury of an anterior root might produce the atrophy and the ocular symptoms.

Dr. Collins asked at what level this must be to cause sympathetic involvement of the right side of the face with destruction of the sixth, seventh and eighth cervical segments.

Dr. Terriberry replied that he did not think there was any reason why the cord need be considered to be involved.

Dr. Onuf said that in a joint investigation, made by Dr. Collins and himself, they had found that the zone situated between the central ganglia on one side and the end of the lateral horn on the other, and between the base of the posterior and anterior horns, was intimately connected with sympathetic functions. They had found that atrophy of the cells of the lateral horn took place in a certain group (the lateral, the central ganglia, and in the whole zone in between), and that this atrophy was partly in the sensory and partly in motor fibres. The motor fibres originate from the smaller cells of the zone mentioned. This being the case, it was evident that syringomyelia could present very different pictures depending upon the particular locality affected. In the case under discussion the sympathetic symptoms were very marked in connection with the eye, and the diarrhœa and the lateral curvature might also be considered as belonging to the same class. In three cases they had extirpated the stellate ganglion in cats. This was usually followed after some weeks by a diarrhœa, which was most persistent and exhausting. This ganglion is supplied chiefly by the upper dorsal nerves.

Dr. M. Allen Starr said that the combination of the sympathetic paralysis with ulnar nerve paralysis he had known to occur in one case of undoubted gumma on the anterior surface of the cord. The gumma was absorbed after a time. The condition had been undoubtedly produced by the pressure on the anterior nerve roots.

Dr. Pearce Bailey said, regarding the first dorsal root, and its relation to the sympathetic, that over ten years ago Klumpke had made her experiments on animals. She had found that the nutritive fibres for the eyeball were affected by the injury of the first dorsal root, but that there were no accompanying vascular disturbances. This had been substantiated by other observers. The vascular supply of the face goes along the spinal canal externally, and is joined by the first dorsal root at its exit.

Dr. Collins said that he had been largely led to make the diagnosis of syringomyelia in this case by the experiments that he had conducted in conjunction with Dr. Onuf. There was nothing else which would produce the four prominent symptoms, viz., the diarrhœa, curvature of the spine, atrophy of the hand muscles and the Schultze eye.

Dr. Hirsch presented a young woman who was an example of total unilateral congenital sweating of the face. She complained that half of the face would become red and moist, while the left half remained dry and of normal color. She never sweats on the left side of the face. He had experimented with hypodermic injections of different drugs. Physostigmin had had no effect at all. Pilocarpin, injected hypodermically, caused perspiration all over her face, for the first time in her life; but, of course, this was only transient. The fact that in this case absence of perspiration is associated with absence of vasomotor symptoms seemed to be in favor of the view that the vasomotor centres and the sweat centres are at least intimately connected. The condition is confined to the face.

Dr. Starr remarked that a case of this kind, occurring in a man of twenty-three years, had been entirely cured in his clinic by boring out his turbinated bones.

Dr. Fraenkel presented a young boy, who had come under his observation about three months ago with a diagnosis of pulmonary tuberculosis, because of an attack of hæmoptysis. He had been well up to two years ago; then he had begun to suffer from shortness of breath. On admission to the Montefiore Home the head was turned to one side, there was inspiratory stridor, a moderate amount of exophthalmos, swelling of the neck and tachycardia. The physical examination of the chest was practically negative. The tumefaction in the neck was lobulated, and moved up and down during deglutition. Under treatment with thyroid extract he had decidedly improved subjectively, and had gained fourteen pounds in body weight. The tachycardia had disappeared. The case was interesting as showing the difference between genuine Basedow's disease and the secondary or symptomatic form.

Dr. C. E. Nammack asked if Hodgkin's disease had been excluded.

Dr. Fraenkel replied that a brother of this patient had twice had tuberculous glands removed, and there had been good reason to believe that this might be a case of Hodgkin's disease, but it had been excluded (1) by the absence of other evidence of lymphatic involvement; (2) by its long duration; (3) by examination of the blood, and (4) by the mobility of the swelling in the neck on deglutition, showing its connection with the thyroid gland.

Dr. B. Sachs presented a man, fifty-one years of age, whom he had first seen about one week ago. He had been married twenty-seven years. Six years ago his wife had been afflicted with the same affection as the one he now suffers from. The patient himself had been in good health in former years, and he still weighs 230 pounds. He has been an extremely heavy drinker, chiefly of beer, taking, at times, as much as fifty or sixty glasses a day. Syphilitic infection could not be established. He had been in good health up to January 12th, 1898, when, while attending the funeral of a friend, he says he saw a flash of light, and this was immediately followed by double vision and intense photophobia. At first glance there would appear to be a double ptosis, but the eyelids can be moved upward. Ordinarily they droop in an effort to protect the eyes. There is slight nystagmus and a decided paresis of the left rectus externus. The pupils are irregular; they do not react to light, and but slightly to accommodation. The case had been referred to him by Dr. Marple, who had found nothing, on ocular examination, to explain the photophobia. Further examination showed a very widespread and marked hemi-analgesia, but no impairment of tactile sensibility. He had arrived at the conclusion that there was a large hysterical element in the case. The visual fields are normal; the reflexes are normal, and there is no evidence of loss of power in the extremities. His diagnosis was hysterical ophthalmoplegia.

Dr. J. Arthur Booth referred to a girl of twenty years, who had had double ptosis, but no ocular paresis, who had been cured by hypnosis.

Dr. Fraenkel said that in a recent monograph hysterical ophthalmoplegias of this character had been described. Aside from the clinical development of the case, its development after emotional disturbance was particularly significant. About six months ago a man, in a very similar condition, had applied for admission to the Home. He presented ataxia, loss of knee-jerks, ptosis and ophthalmoplegia. After admission his ptosis and ophthalmoplegia disappeared, and the case proved to be clearly one of locomotor ataxia, the other symptoms having been hysterical, and added to the others with a view to securing his admission.

Dr. Leszynsky said it was important to distinguish between ptosis and blepharospasm. In the case under discussion there seemed to be a certain amount of blepharospasm. With photophobia tonic blepharospasm was much more likely to occur than ptosis. He had seen a number of such cases in hysterical individuals, and quite recently one in a young girl who responded promptly to hypnosis.

Dr. Peterson referred to a case of bilateral ptosis, or, rather, of tonic blepharospasm, which had presented very much the picture shown in this patient. A cure had been effected by two or three applications of the faradic current.

Dr. Sachs said he proposed to treat this case bv suggestion.

Dr. Sachs then presented another case of ophthalmoplegia, in a boy of seventeen years. In October, 1894, at 9 A. M., he had found himself unable to utter words. This had passed away, but had been repeated at noon and at 4 P. M. He had then a convulsion lasting ten minutes, after which the left eyelid had been noticed to droop. There had been no convulsions since then. He had been perfectly well previously. Examination showed ptosis of the left eye and slight ptosis of the right eye. The outward and inward movements were limited in single and conjugate action; both pupils reacted well to light and accommodation; the sensation of the face was normal. There had been comparatively little change in the past three years. There is diplopia, chiefly when looking to the left. The diagnosis lay between thrombosis or embolism in the basilar artery. The heart action is irregular and rather rapid, but no murmur is audible. Six years ago he was under treatment for a time for cardiac palpitation.

Dr. Sachs also presented a man, thirty-nine years of age, who had been admitted to the Montefiore Home some time ago. There was no evidence of syphilis. At the age of twenty he was weak in the knees and frequently made missteps. In 1887 he had sought medical advice because of difficulty of locomotion, noticed especially in climbing stairs. When examined in March, 1895, he complained chiefly of difficulty in walking, weakness in the extremities and slight difficulty in speech. At first the case was supposed to be one of locomotor ataxia. He now has an ataxic spastic gait, and also has static ataxia; the pupils react to light and during accommodation; the patellar reflexes are absent. There is no Argyll-Robertson pupil. There is distinct ataxia of the right upper extremity. He has a form of speech which is midway between a slow speech and a bulbar speech. The diagnosis lies between a bulbar form of multiple sclerosis and the possibility of Friedreich's ataxia instead of an ordinary tabes. The great point against Friedreich's ataxia was its occurrence rather late in life; while the absence of the knee-jerks militated against multiple sclerosis. There was no disturbance of sensation. The jaw-jerk is absent.

Dr. Fraenkel said that, although the lack of co-ordination was first noticed at the age of nineteen, when his attention was naturally directed to it by entering the army, it was not improbable that it had been present long before. There was also slight atrophy of the optic nerves. The absence of sexual and sphincteric disturbance and the peculiar thick and scanning speech seemed to point rather to the diagnosis of multiple sclerosis.

Dr. Collins said that when he had first seen the man, three years ago, the intention tremor and the optic atrophy had not been present, and it was then thought that the man had Friedreich's disease. In the last two years the speech had become very much more bulbar in quality. He was inclined to believe that there was a diffuse insular sclerosis, bulbar and spinal.

Dr. Hirsch said that even at the present time there was not a perfect agreement as to what constitutes the pathological basis of Friedreich's disease. The case seemed to him like the cerebellar form of Friedreich's disease.

Dr. Sachs said that the term "Friedreich's disease" is at the present time applied usually to the ordinary hereditary ataxia, the disease being located partly in the posterior, and partly in the lateral columns of the cord.